

## SEQUENCE LISTING

<110> Queen Mary & Westfield College  
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Li, Suling

<120> Microsome Vaccine

<130> P35703WO/NCB

<140> PCT/GB2004/003285

<141> 2004-07-30

<150> GB 0318096.5

<151> 2003-08-01

<160> 317

<170> PatentIn version 3.1

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Asn Ile

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Leu Thr

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Gln Leu

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 <213> Homo sapiens

<400> 137

Ser	Leu	Phe	His	Pro	Glu	Asp	Thr	Gly	Gln	Val	Phe	Gln
1				5					10			

<210> 138  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 138

Gln	Val	Phe	Gln	Val	Ser	His	Ser	Phe	Pro	His	Pro	Leu	Tyr	Asp
1				5					10					15

<210> 139  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 139

Asn	Asp	Leu	Met	Leu	Leu	Arg	Leu	Ser	Glu	Pro	Ala	Glu	Leu	Thr
1				5					10					15

<210> 140  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 140

Lys	Lys	Leu	Gln	Cys	Val	Gln	Leu	His	Val	Ile	Ser	Met
1				5					10			

<210> 141  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 141

Gly	Val	Leu	Gln	Gly	Ile	Thr	Ser	Met	Gly	Ser	Glu	Pro	Cys	Ala
1				5					10					15

<210> 142  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 142

Gln Asn Ile Leu Leu Ser Asn Ala Pro Leu Gly Pro Gln Phe Pro  
 1 5 10 15

<210> 143  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 143

Asp Tyr Ser Tyr Leu Gln Asp Ser Asp Pro Asp Ser Phe Gln Asp  
 1 5 10 15

<210> 144  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 144

Ser Tyr Leu Gln Asp Ser Asp Pro Asp Ser Phe Gln Asp  
 1 5 10

<210> 145  
 <211> 21  
 <212> PRT  
 <213> Homo sapiens

<400> 145

Arg His Arg Pro Leu Gln Glu Val Tyr Pro Glu Ala Asn Ala Pro Ile  
 1 5 10 15

Gly His Asn Arg Glu  
 20

<210> 146  
 <211> 11  
 <212> PRT  
 <213> Homo sapiens

<400> 146

Glu Ile Trp Arg Asp Ile Asp Phe Ala His Glu  
 1 5 10

<210> 147  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 147

Leu Phe Met Asp Thr Leu Ser Phe Val Cys Pro Leu Cys  
 1 5 10

<210> 148  
 <211> 13  
 <212> PRT  
 <213> Homo sapiens

<400> 148

Leu Phe Met Asp Ser Leu Asn Phe Val Cys Pro Trp Cys  
 1 5 10

<210> 149  
 <211> 12  
 <212> PRT  
 <213> Homo sapiens

<400> 149

Phe Ser Trp Ala Met Asp Leu Asp Pro Lys Gly Ala  
 1 5 10

<210> 150  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 150

Gly Glu Leu Ile Gly Ile Leu Asn Ala Ala Lys Val Pro Ala Asp  
 1 5 10 15

<210> 151  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 151

Phe Met Val Glu Leu Val Glu Gly Ala  
 1 5

<210> 152  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 152

Lys Leu Ser Glu Gln Glu Ser Leu Leu  
 1 5

<210> 153  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 153

Met Leu Thr Asn Ser Cys Val Lys Leu  
 1 5

<210> 154  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 154

Ser Ser Lys Ala Leu Gln Arg Pro Val  
1 5

<210> 155  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 155

Ala Thr Gly Phe Lys Gln Ser Ser Lys  
1 5

<210> 156  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 156

Lys Gln Ser Ser Lys Ala Leu Gln Arg  
1 5

<210> 157  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 157

His Ser Ala Thr Gly Phe Lys Gln Ser Ser Lys  
1 5 10



<210> 158  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 158

Lys Gln Ser Ser Lys Ala Leu Gln Arg  
 1 5

<210> 159  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 159

Gly Phe Lys Gln Ser Ser Lys Ala Leu  
 1 5

<210> 160  
 <211> 9  
 <212> PRT  
 <213> Homo sapiens

<400> 160

Arg Ile Ala Glu Cys Ile Leu Gly Met  
 1 5

<210> 161  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 161

Glu Gly Ala Phe His Gly Asp Ala Glu Ala Leu Gln Arg Pro Val Ala  
 1 5 10 15

Ser

<210> 162  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 162

Ile Pro Leu Thr Ile Asn Lys Glu Glu Ala Leu Gln Arg Pro Val Ala  
 1 5 10 15

Ser

<210> 163  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 163

Ala Thr Gly Phe Lys Gln Ser Ser Lys Ala Leu Gln Arg Pro Val Ala  
 1 5 10 15

Ser

<210> 164  
 <211> 24  
 <212> PRT  
 <213> Homo sapiens

<400> 164

Leu Ile Val Val Ile Val His Ser Ala Thr Gly Phe Lys Gln Ser Ser  
 1 5 10 15

Lys Ala Leu Gln Arg Pro Val Ala  
 20

<210> 165  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 165

Ile Val His Ser Ala Thr Gly Phe Lys Gln Ser Ser Lys Ala Leu Gln  
 1 5 10 15

Arg Pro Val Ala Ser Asp Phe Glu Pro  
 20 25

<210> 166  
 <211> 16  
 <212> PRT  
 <213> Homo sapiens

<400> 166

Thr Met Lys Gln Ile Cys Lys Lys Glu Ile Arg Arg Leu His Gln Tyr  
 1 5 10 15

<210> 167  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 167

Gly Gly Ala Pro Pro Val Thr Trp Arg Arg Ala Pro Ala Pro Gly  
 1 5 10 15

<210> 168  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 168

Trp Arg Arg Ala Pro Ala Pro Gly Ala Lys Ala Met Ala Pro Gly  
 1 5 10 15

<210> 169  
 <211> 25  
 <212> PRT  
 <213> Homo sapiens

<400> 169

Asn	Ser	Asn	His	Val	Ala	Ser	Gly	Ala	Gly	Glu	Ala	Ala	Ile	Glu	Thr
1				5					10					15	

Gln	Ser	Ser	Ser	Ser	Glu	Glu	Ile	Val
			20				25	

<210> 170  
 <211> 17  
 <212> PRT  
 <213> Homo sapiens

<400> 170

Glu	Gly	Ala	Phe	His	Gly	Asp	Ala	Glu	Ala	Leu	Gln	Arg	Pro	Val	Ala
1				5					10					15	

Ser

<210> 171  
 <211> 15  
 <212> PRT  
 <213> Homo sapiens

<400> 171

Ile	Gly	Arg	Ile	Ala	Glu	Cys	Ile	Leu	Gly	Met	Asn	Pro	Ser	Arg
1				5					10					15

<210> 172  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 172

Met Ser Thr Asn Pro Lys Pro Gln Lys  
1 5

<210> 173  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 173

Met Ser Thr Asn Pro Lys Pro Gln Arg  
1 5

<210> 174  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 174

Cys Gln Ile Val Gly Gly Val Tyr Leu Leu  
1 5 10

<210> 175  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 175

Tyr Leu Leu Pro Arg Arg Gly Pro Arg Leu  
1 5 10

<210> 176  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 176

Gly Pro Arg Leu Gly Val Arg Ala Thr  
1 5

<210> 177  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 177

Arg Leu Gly Val Arg Ala Thr Arg Lys  
1 5

<210> 178  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 178

Lys Thr Ser Glu Arg Ser Gln Pro Arg  
1 5

<210> 179  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 179

Asn Glu Gly Leu Gly Trp Gly Ala Trp  
1 5

<210> 180  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 180

Asn Glu Gly Cys Gly Trp Gly Ala Trp  
1 5

<210> 181  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 181

Asp Leu Met Gly Tyr Ile Pro Leu Val  
1 5

<210> 182  
<211> 9  
<212> PRT  
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<400> 182

Leu Pro Gly Cys Ser Phe Ser Ile Phe  
1 5

<210> 183  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 183

Leu Leu Ala Leu Leu Ser Cys Leu Thr Val  
1 5 10

<210> 184  
 <211> 9  
 <212> PRT  
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<400> 184

Asn Ala Ser Arg Cys Trp Val Ala Met  
 1 5

<210> 185  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 185

Gln Leu Arg Arg His Ile Asp Leu Leu Val  
 1 5 10

<210> 186  
 <211> 9  
 <212> PRT  
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<400> 186

Gln Leu Phe Thr Phe Ser Pro Arg Arg  
 1 5

<210> 187  
 <211> 11  
 <212> PRT  
 <213> Hepatitis C virus

<400> 187

Ser Leu Leu Ala Pro Gly Ala Lys Gln Asn Val  
 1 5 10



<210> 188  
 <211> 13  
 <212> PRT  
 <213> Hepatitis C virus

<400> 188

Pro Glu Arg Leu Ser Cys Arg Pro Leu Thr Asp Phe Asp  
 1 5 10

<210> 189  
 <211> 13  
 <212> PRT  
 <213> Hepatitis C virus

<400> 189

Pro Glu Arg Leu Ala Ser Cys Arg Pro Leu Thr Asp Phe  
 1 5 10

<210> 190  
 <211> 10  
 <212> PRT  
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<400> 190

Arg Pro Leu Thr Asp Phe Asp Gln Gly Trp  
 1 5 10

<210> 191  
 <211> 8  
 <212> PRT  
 <213> Hepatitis C virus

<400> 191

Tyr Pro Pro Lys Pro Cys Gly Ile  
 1 5

<210> 192  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 192

Cys Val Ile Gly Gly Ala Gly Asn Asn Thr  
 1 5 10

<210> 193  
 <211> 8  
 <212> PRT  
 <213> Hepatitis C virus

<400> 193

Thr Ile Asn Tyr Thr Ile Phe Lys  
 1 5

<210> 194  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 194

Arg Met Tyr Val Gly Gly Val Glu His Arg  
 1 5 10

<210> 195  
 <211> 9  
 <212> PRT  
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<400> 195

Leu Leu Phe Leu Leu Leu Ala Asp Ala  
 1 5

<210> 196  
 <211> 9  
 <212> PRT  
 <213> Hepatitis C virus

<400> 196

Phe Leu Leu Leu Ala Asp Ala Arg Val  
 1 5

<210> 197  
 <211> 13  
 <212> PRT  
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<400> 197

Leu Met Ala Leu Thr Leu Ser Pro Tyr Tyr Lys Arg Tyr  
 1 5 10

<210> 198  
 <211> 8  
 <212> PRT  
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<400> 198

Met Ala Leu Thr Leu Ser Pro Tyr  
 1 5

<210> 199  
 <211> 9  
 <212> PRT  
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<400> 199

Tyr Ile Ser Trp Cys Leu Trp Trp Leu  
 1 5

<210> 200  
 <211> 9  
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<400> 200

Cys Ile Asn Gly Val Cys Trp Thr Val  
 1 5

<210> 201  
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 <212> PRT  
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<400> 201

Tyr Leu Val Thr Arg His Ala Asp Val  
 1 5

<210> 202  
 <211> 9  
 <212> PRT  
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<400> 202

Leu Leu Cys Pro Ala Gly His Ala Val  
 1 5

<210> 203  
 <211> 10  
 <212> PRT  
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<400> 203

Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys  
 1 5 10

<210> 204  
 <211> 9  
 <212> PRT  
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<400> 204

Leu Gly Phe Gly Ala Tyr Met Ser Lys  
 1 5

<210> 205  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 205

Gly Ala Tyr Met Ser Lys Ala His Gly Val  
 1 5 10

<210> 206  
 <211> 10  
 <212> PRT  
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<400> 206

Thr Gly Ala Pro Val Thr Tyr Ser Thr Tyr  
 1 5 10

<210> 207  
 <211> 10  
 <212> PRT  
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<400> 207

Thr Gly Ser Pro Ile Thr Tyr Ser Thr Tyr  
 1 5 10

<210> 208  
 <211> 9  
 <212> PRT  
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<400> 208

Leu Ile Phe Cys His Ser Lys Lys Lys  
 1 5

<210> 209  
 <211> 9  
 <212> PRT  
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<400> 209

His Ser Lys Lys Lys Cys Asp Glu Leu  
 1 5

<210> 210  
 <211> 10  
 <212> PRT  
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<400> 210

Lys Leu Val Ala Leu Gly Ile Asn Ala Val  
 1 5 10

<210> 211  
 <211> 9  
 <212> PRT  
 <213> Hepatitis C virus

<400> 211

Tyr Leu Val Ala Tyr Gln Ala Thr Val  
 1 5

<210> 212  
<211> 8  
<212> PRT  
<213> Hepatitis C virus

<400> 212

Leu Ile Arg Leu Lys Pro Thr Leu  
1 5

<210> 213  
<211> 8  
<212> PRT  
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<400> 213

Thr Leu Thr His Pro Val Thr Lys  
1 5

<210> 214  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 214

Val Leu Val Gly Gly Val Leu Ala Ala  
1 5

<210> 215  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 215

His Met Trp Asn Phe Ile Ser Gly Ile  
1 5

<210> 216  
 <211> 9  
 <212> PRT  
 <213> Hepatitis C virus

<400> 216

Ser Leu Met Ala Phe Thr Ala Ala Val  
 1 5

<210> 217  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 217

Leu Leu Phe Asn Ile Leu Gly Gly Trp Val  
 1 5 10

<210> 218  
 <211> 9  
 <212> PRT  
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<400> 218

Ile Leu Ala Gly Tyr Gly Ala Gly Val  
 1 5

<210> 219  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 219

Gly Val Ala Gly Ala Leu Val Ala Phe Lys  
 1 5 10



<210> 220  
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<212> PRT  
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<400> 220

Val Ala Gly Ala Leu Val Ala Phe Lys  
1 5

<210> 221  
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<212> PRT  
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<400> 221

Trp Met Asn Arg Leu Ile Ala Phe Ala  
1 5

<210> 222  
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<212> PRT  
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<400> 222

Asn His Asp Ser Pro Asp Ala Glu Leu  
1 5

<210> 223  
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<212> PRT  
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<400> 223

Ile Leu Asp Ser Phe Asp Pro Leu Val  
1 5

<210> 224  
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<212> PRT  
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<400> 224

Arg Glu Ile Ser Val Pro Ala Glu Ile Leu  
1 5 10

<210> 225  
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<212> PRT  
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<400> 225

Ser Leu Thr Pro Pro His Ser Ala Lys  
1 5

<210> 226  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 226

Arg Leu Ile Val Phe Pro Asp Leu Gly Val  
1 5 10

<210> 227  
<211> 9  
<212> PRT  
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<400> 227

Arg Val Cys Glu Lys Met Ala Leu Tyr  
1 5

<210> 228  
<211> 9  
<212> PRT  
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<400> 228

Lys Ser Lys Lys Thr Pro Met Gly Phe  
1 5

<210> 229  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 229

Gly Leu Gln Asp Cys Thr Met Leu Val  
1 5

<210> 230  
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<212> PRT  
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<400> 230

His Asp Gly Ala Gly Lys Arg Val Tyr  
1 5

<210> 231  
<211> 11  
<212> PRT  
<213> Hepatitis C virus

<400> 231

His Asp Gly Ala Gly Lys Arg Val Tyr Tyr Leu  
1 5 10

<210> 232  
<211> 9  
<212> PRT  
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<400> 232

Val Gly Ile Tyr Leu Leu Pro Asn Arg  
1 5

<210> 233  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 233

Gly Ser Glu Glu Leu Arg Ser Leu Tyr  
1 5

<210> 234  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 234

Ile Ser Glu Arg Ile Leu Ser Thr Tyr  
1 5

<210> 235  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 235

Ile Leu Lys Asp Pro Val His Gly Val  
1 5

<210> 236  
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<212> PRT  
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<400> 236

Ile Leu Lys Glu Pro Val His Gly Val  
1 5

<210> 237  
<211> 9  
<212> PRT  
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<400> 237

Ser Leu Phe Asn Thr Val Ala Thr Leu  
1 5

<210> 238  
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<400> 238

Ser Leu Tyr Asn Thr Val Ala Thr Leu  
1 5

<210> 239  
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<400> 239

Thr Leu Asn Ala Trp Val Lys Val Val  
1 5

<210> 240  
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<400> 240

Thr Leu Asn Ala Trp Val Lys Val Ile  
1 5

<210> 241  
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<400> 241

Ala Leu Lys His Arg Ala Tyr Glu Leu  
1 5

<210> 242  
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<400> 242

Ala Phe His His Val Ala Arg Glu Leu  
1 5

<210> 243  
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<400> 243

Lys Ile Arg Leu Arg Pro Gly Gly Lys  
1 5

<210> 244  
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<400> 244

Arg Leu Arg Asp Leu Leu Leu Ile Val Thr Arg  
1 5 10

<210> 245  
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<212> PRT  
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<400> 245

Ser Ile Phe Gln Ser Ser Met Thr Lys  
1 5

<210> 246  
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<400> 246

Ala Ile Phe Gln Ser Ser Met Thr Lys  
1 5

<210> 247  
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<400> 247

Asp Leu Ser His Phe Leu Lys Glu Lys  
1 5

<210> 248  
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<212> PRT  
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<400> 248

Gln Val Pro Leu Arg Pro Met Thr Tyr Lys  
1 5 10

<210> 249  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 249

Ala Val Asp Leu Ser His Phe Leu Lys  
1 5

<210> 250  
<211> 10  
<212> PRT  
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<400> 250

Ile Tyr Gln Glu Pro Phe Lys Asn Leu Lys  
1 5 10

<210> 251  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 251

Thr Leu Tyr Cys Val His Gln Arg Ile  
1 5



<210> 252  
<211> 8  
<212> PRT  
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<400> 252

Tyr Leu Arg Asp Gln Gln Leu Leu  
1 5

<210> 253  
<211> 8  
<212> PRT  
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<400> 253

Tyr Leu Lys Asp Gln Gln Leu Leu  
1 5

<210> 254  
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<212> PRT  
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<400> 254

Arg Tyr Leu Arg Asp Gln Gln Leu Leu  
1 5

<210> 255  
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<212> PRT  
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<400> 255

Arg Tyr Leu Lys Asp Gln Gln Leu Leu  
1 5

<210> 256  
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<400> 256

Leu Phe Cys Ala Ser Asp Ala Lys Ala Tyr  
 1 5 10

<210> 257  
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<400> 257

Asp Ser Arg Leu Ala Phe His His Met  
 1 5

<210> 258  
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<400> 258

Arg Asp Tyr Val Asp Arg Phe Phe Lys Thr Leu  
 1 5 10

<210> 259  
 <211> 10  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 259

Val Ser Phe Glu Pro Ile Pro Ile His Tyr  
 1 5 10

<210> 260  
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<212> PRT  
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<400> 260

Asp Thr Val Leu Glu Asp Ile Asn Leu  
1 5

<210> 261  
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<212> PRT  
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<400> 261

Glu Thr Ala Tyr Phe Tyr Ile Leu Lys Leu  
1 5 10

<210> 262  
<211> 9  
<212> PRT  
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<400> 262

Ile Thr Leu Trp Gln Arg Pro Leu Val  
1 5

<210> 263  
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<400> 263

Ile Pro Arg Arg Ile Arg Gln Gly Leu  
1 5

<210> 264  
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 <212> PRT  
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<400> 264

Thr Pro Gly Pro Gly Val Arg Tyr Pro Leu  
 1 5 10

<210> 265  
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 <212> PRT  
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<400> 265

Thr Pro Gly Pro Gly Ile Arg Tyr Pro Leu  
 1 5 10

<210> 266  
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 <213> Human immunodeficiency virus type 1

<400> 266

Phe Pro Val Thr Pro Gln Val Pro Leu Arg  
 1 5 10

<210> 267  
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<400> 267

Ser Pro Arg Thr Leu Asn Ala Trp Val  
 1 5

<210> 268  
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<212> PRT  
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<400> 268

Gly Pro Lys Val Lys Gln Trp Pro Leu  
1 5

<210> 269  
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<212> PRT  
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<400> 269

Tyr Leu Lys Asp Gln Gln Leu Leu  
1 5

<210> 270  
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<400> 270

Gly Gly Lys Lys Lys Tyr Arg Leu  
1 5

<210> 271  
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<400> 271

Asp Arg Phe Phe Lys Thr Leu Arg Ala  
1 5

<210> 272  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 272

Asp Arg Phe Trp Lys Thr Leu Arg Ala  
1 5

<210> 273  
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<212> PRT  
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<400> 273

Asp Leu Asn Met Met Leu Asn Ile Val  
1 5

<210> 274  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 274

Asp Leu Asn Thr Met Leu Asn Val Val  
1 5

<210> 275  
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<212> PRT  
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<400> 275

Glu Arg Tyr Leu Arg Asp Gln Gln Leu  
1 5

<210> 276  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 276

Arg Ala Glu Gln Ala Ser Gln Glu Val  
1 5

<210> 277  
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<212> PRT  
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<400> 277

Tyr Pro Leu Thr Phe Gly Trp Cys Tyr  
1 5

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<400> 278

Tyr Pro Leu Thr Phe Gly Trp Cys Phe  
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<400> 279

Phe Arg Asp Tyr Val Asp Arg Phe Tyr Lys  
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<400> 280

Phe Arg Asp Tyr Val Asp Arg Phe Phe Lys  
 1 5 10

<210> 281  
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<400> 281

Lys Arg Trp Ile Ile Leu Gly Leu Asn Lys  
 1 5 10

<210> 282  
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 <212> PRT  
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<400> 282

Lys Arg Trp Ile Ile Met Gly Leu Asn Lys  
 1 5 10

<210> 283  
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<400> 283

Thr Ala Val Pro Trp Asn Ala Ser Trp  
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<210> 284  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 284

Val Pro Leu Arg Pro Met Thr Tyr  
1 5

<210> 285  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 285

His Pro Asp Ile Val Ile Tyr Gln Tyr  
1 5

<210> 286  
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<400> 286

Asn Pro Asp Ile Val Ile Tyr Gln Tyr  
1 5

<210> 287  
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<212> PRT  
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<400> 287

Pro Pro Ile Pro Val Gly Asp Ile Tyr  
1 5

<210> 288  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 288

Ile Pro Leu Thr Glu Glu Ala Glu Leu  
1 5

<210> 289  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 289

Asp Pro Asn Pro Gln Glu Val Val Leu  
1 5

<210> 290  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 290

Leu Pro Cys Arg Ile Lys Gln Ile Ile  
1 5

<210> 291  
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<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 291

Ala Thr Gln Glu Val Lys Asn Trp Met  
1 5

<210> 292  
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<400> 292

Ala Ser Gln Glu Val Lys Asn Trp Met  
1 5

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<400> 293

Asp Thr Ile Asn Glu Glu Ala Ala Glu Trp  
1 5 10

<210> 294  
<211> 9  
<212> PRT  
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<400> 294

Gln Ala Thr Gln Glu Val Lys Asn Trp  
1 5

<210> 295  
<211> 10  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 295

Glu Val Lys Asn Trp Met Thr Glu Thr Leu  
1 5 10

<210> 296  
 <211> 10  
 <212> PRT  
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<400> 296

Thr Ser Thr Leu Gln Glu Gln Ile Gly Trp  
 1 5 10

<210> 297  
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 <212> PRT  
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<400> 297

Leu Ser Pro Arg Thr Leu Asn Ala Trp  
 1 5

<210> 298  
 <211> 9  
 <212> PRT  
 <213> Human immunodeficiency virus type 1

<400> 298

Ile Ser Pro Arg Thr Leu Asn Ala Trp  
 1 5

<210> 299  
 <211> 11  
 <212> PRT  
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<400> 299

Lys Ala Phe Ser Pro Glu Val Ile Pro Met Phe  
 1 5 10

<210> 300  
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<212> PRT  
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<400> 300

Gln Ala Ile Ser Pro Arg Thr Leu  
1 5

<210> 301  
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<212> PRT  
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<400> 301

Ser Phe Asn Cys Gly Gly Glu Phe Phe  
1 5

<210> 302  
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<212> PRT  
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<400> 302

Lys Tyr Arg Leu Lys His Leu Val Trp  
1 5

<210> 303  
<211> 9  
<212> PRT  
<213> Human immunodeficiency virus type 1

<400> 303

Gln Ala Ser Gly Glu Val Lys Asn Trp  
1 5

<210> 304  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 304

Cys Val Ile Gly Gly Ala Gly Asn Asn Thr  
1 5 10

<210> 305  
<211> 9  
<212> PRT  
<213> Hepatitis C virus

<400> 305

Gly Pro Arg Leu Gly Val Arg Ala Thr  
1 5

<210> 306  
<211> 8  
<212> PRT  
<213> Hepatitis C virus

<400> 306

Gly Pro Arg Leu Gly Val Arg Ala  
1 5

<210> 307  
<211> 10  
<212> PRT  
<213> Hepatitis C virus

<400> 307

Trp His Tyr Pro Pro Lys Pro Cys Gly Ile  
1 5 10

<210> 308  
 <211> 11  
 <212> PRT  
 <213> Hepatitis C virus

<400> 308

Tyr Pro Pro Lys Pro Cys Gly Ile Val Pro Ala  
 1 5 10

<210> 309  
 <211> 8  
 <212> PRT  
 <213> Hepatitis C virus

<400> 309

Tyr Pro Pro Lys Pro Cys Gly Ile  
 1 5

<210> 310  
 <211> 8  
 <212> PRT  
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<400> 310

Ser Thr Asn Pro Lys Pro Gln Lys  
 1 5

<210> 311  
 <211> 11  
 <212> PRT  
 <213> Hepatitis C virus

<400> 311

Met Ser Thr Asn Pro Lys Pro Lys Lys Asn Lys  
 1 5 10

<210> 312  
 <211> 9  
 <212> PRT  
 <213> Hepatitis C virus

<400> 312

Cys Val Asn Gly Val Cys Trp Thr Val  
 1 5

<210> 313  
 <211> 10  
 <212> PRT  
 <213> Hepatitis C virus

<400> 313

Lys Leu Val Ala Leu Gly Ile Asn Ala Val  
 1 5 10

<210> 314  
 <211> 365  
 <212> PRT  
 <213> Homo sapiens

<400> 314

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala  
 1 5 10 15

Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe  
 20 25 30

Phe Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala  
 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala  
 50 55 60



Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly  
65 70 75 80

Pro Glu Tyr Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln  
85 90 95

Thr His Arg Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser  
100 105 110

Glu Ala Gly Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly  
115 120 125

Ser Asp Trp Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly  
130 135 140

Lys Asp Tyr Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala  
145 150 155 160

Asp Met Ala Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val  
165 170 175

Ala Glu Gln Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu  
180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala  
195 200 205

Pro Lys Thr His Met Thr His His Ala Val Ser Asp His Glu Ala Thr  
210 215 220

Leu Arg Cys Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr  
225 230 235 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu  
245 250 255

Thr Arg Pro Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val  
 260 265 270

Val Pro Ser Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu  
 275 280 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro  
 290 295 300

Thr Ile Pro Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe Gly Ala  
 305 310 315 320

Val Ile Thr Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser  
 325 330 335

Ser Asp Arg Lys Gly Gly Ser Tyr Ser Gln Ala Ala Ser Ser Asp Ser  
 340 345 350

Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val  
 355 360 365

<210> 315

<211> 362

<212> PRT

<213> Homo sapiens

<400> 315

Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Leu Ser Ala Ala  
 1 5 10 15

Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe  
 20 25 30

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser  
 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala  
 50 55 60

Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly  
 65 70 75 80

Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln  
 85 90 95

Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser  
 100 105 110

Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly  
 115 120 125

Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly  
 130 135 140

Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala  
 145 150 155 160

Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu  
 165 170 175

Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu  
 180 185 190

Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro  
 195 200 205

Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr  
 210 215 220

Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr  
 225 230 235 240

Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu  
 245 250 255

Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Trp Ala Ala Val Val  
 260 265 270

Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His Glu  
 275 280 285

Gly Leu Pro Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Ser  
 290 295 300

Thr Val Pro Ile Val Gly Ile Val Ala Gly Leu Ala Val Leu Ala Val  
 305 310 315 320

Val Val Ile Gly Ala Val Val Ala Ala Val Met Cys Arg Arg Lys Ser  
 325 330 335

Ser Gly Gly Lys Gly Gly Ser Tyr Ser Gln Ala Ala Cys Ser Asp Ser  
 340 345 350

Ala Gln Gly Ser Asp Val Ser Leu Thr Ala  
 355 360

<210> 316

<211> 266

<212> PRT

<213> Homo sapiens

<400> 316

Met Val Cys Leu Lys Leu Pro Gly Gly Ser Ser Leu Ala Ala Leu Thr  
 1 5 10 15

Val Thr Leu Met Val Leu Ser Ser Arg Leu Ala Phe Ala Gly Asp Thr  
 20 25 30

85

Arg Pro Arg Phe Leu Glu Leu Arg Lys Ser Glu Cys His Phe Phe Asn  
35 40 45

Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu  
50 55 60

Glu Phe Leu Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr  
65 70 75 80

Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn Ser Gln Lys Asp Leu  
85 90 95

Leu Glu Gln Lys Arg Gly Arg Val Asp Asn Tyr Cys Arg His Asn Tyr  
100 105 110

Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg Val His Pro Gln Val  
115 120 125

Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln His His Asn Leu Leu  
130 135 140

Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp  
145 150 155 160

Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val Val Ser Thr Gly Leu  
165 170 175

Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu Val Met Leu Glu Thr  
180 185 190

Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln Val Glu His Pro Ser  
195 200 205

Val Thr Ser Ala Leu Thr Val Glu Trp Arg Ala Arg Ser Glu Ser Ala  
210 215 220

Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe Val Leu Gly Leu Leu  
 225 230 235 240

Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg Asn Gln Lys Gly His  
 245 250 255

Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser  
 260 265

<210> 317

<211> 254

<212> PRT

<213> Homo sapiens

<400> 317

Met Ile Leu Asn Lys Ala Leu Leu Leu Gly Ala Leu Ala Leu Thr Thr  
 1 5 10 15

Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala  
 20 25 30

Ser Tyr Gly Val Asn Leu Tyr Gln Ser Tyr Gly Pro Ser Gly Gln Tyr  
 35 40 45

Thr His Glu Phe Asp Gly Asp Glu Gln Phe Tyr Val Asp Leu Gly Arg  
 50 55 60

Lys Glu Thr Val Trp Cys Leu Pro Val Leu Arg Gln Phe Arg Phe Asp  
 65 70 75 80

Pro Gln Phe Ala Leu Thr Asn Ile Ala Val Thr Lys His Asn Leu Asn  
 85 90 95

Ile Leu Ile Lys Arg Ser Asn Ser Thr Ala Ala Thr Asn Glu Val Pro  
 100 105 110

Glu Val Thr Val Phe Ser Lys Ser Pro Val Thr Leu Gly Gln Pro Asn  
 115 120 125

Thr Leu Ile Cys Leu Val Asp Asn Ile Phe Pro Pro Val Val Asn Ile  
 130 135 140

Thr Trp Leu Ser Asn Gly His Ser Val Thr Glu Gly Val Ser Glu Thr  
 145 150 155 160

Ser Phe Leu Ser Lys Ser Asp His Ser Phe Phe Lys Ile Ser Tyr Leu  
 165 170 175

Thr Phe Leu Pro Ser Ala Asp Glu Ile Tyr Asp Cys Lys Val Glu His  
 180 185 190

Trp Gly Leu Asp Glu Pro Leu Leu Lys His Trp Glu Pro Glu Ile Pro  
 195 200 205

Ala Pro Met Ser Glu Leu Thr Glu Thr Val Val Cys Ala Leu Gly Leu  
 210 215 220

Ser Val Gly Leu Val Gly Ile Val Val Gly Thr Val Phe Ile Ile Arg  
 225 230 235 240

Gly Leu Arg Ser Val Gly Ala Ser Arg His Gln Gly Pro Leu  
 245 250